

ABSTRACT

The invention provides, improved herbicide compositions, methods of making the compositions and methods of controlling plant growth. The subject invention relates to combining fatty acid based and other herbicides with succinic acid, succinic acid derivatives and other additives such as those having essentially no herbicidal activity to increase the activity of the herbicide and provide methods of controlling plant growth by applying a combination of a herbicidal fatty acid with succinic acid and/or succinic acid derivative chemicals and/or other additives. In addition to the use of succinic acid, combining other Krebs cycle acids with herbicides can also provide beneficial effects. Concentrations of herbicides and additives applied to plants in accordance with the invention can include compositions involving 0.1 to 30% herbicide, preferably 0.5 to 15% herbicide and additive and more preferably 1-8% herbicide. The ratio of herbicide, such as fatty acid herbicide to activity enhancing additives can be from 1:10 to 20:1, preferably 1:1 to 20:1, most preferably 1:1 to 5:1.